

Amendments to the Claims:

Please cancel claims 3, 6, 9 and 16. Please amend claims 1, 4, 7, 14 and add new claims 21 and 22. Thus, by the virtue of this amendment, claims 1, 4, 7, 10-14, 17-22 will be pending in the application.

1. (Currently amended) An apparatus for correcting keystone distortions in a display system comprising:

a horizontal size generator that receives N horizontal sync signals of an input image and generates N corresponding horizontal output sizes, each of said output sizes being generated at each of said sync signals based on a horizontal input size, a vertical size, and a desired keystone factor of said input image; and

a format converter that receives said input image and generates an output image, by converting the received input image based on the horizontal input size so that each line of said output image now having said corresponding has a horizontal output size~~[[,]]~~ corresponding to a successive one of the N horizontal output sizes generated by said horizontal size generator;

a sync signal generator that generates a read control signals ~~signal~~ based on said N horizontal sync signals and said horizontal out put sizes; and

a line memory that stores each line of said output image generated from said format converter and outputs said each stored line of said output image according to said read control ~~signals;~~ signal.

where N represents a total number of lines of said output image.

2. (Canceled)

3. (Canceled)

4. (Currently amended) An apparatus for correcting keystone distortions in a display system comprising:

a horizontal size generator that receives N horizontal sync signals of an input image and generates N corresponding horizontal output sizes, each of said horizontal output sizes being generated at each of said sync signals based on a horizontal input size and each of N corresponding horizontal keystone offsets of said input image; and

a format converter that receives said input image and generates an output image, by converting the received input image based on the horizontal input size so that each line of said output image ~~now having said corresponding~~ has a horizontal output size[[,]] corresponding to a successive one of the N horizontal output sizes generated by said horizontal size generator;

where N represents a total number of lines of said output image.

a sync signal generator that generates a read control signals signal based on said N horizontal sync signals and said horizontal output sizes; and

a line memory that stores each line of said output image generated from said format converter and outputs said each stored line of said output image according to said read control signals.

where N represents a total number of lines of said output image.

5. (Canceled)

6. (Canceled)

7. (Currently amended) A method for correcting keystone distortions in a display system comprising:

receiving N horizontal sync signals of an input image;

generating N corresponding horizontal output sizes, each of said output sizes being generated at each of said sync signals based on a horizontal input size, a vertical size, and a desired keystone factor of said input image; and

receiving said input image at a format converter and generating an output image by a ~~format converter~~, each line of said output image ~~now having said corresponding~~ has a horizontal output size- corresponding to a successive one of the N horizontal output sizes generated by said horizontal output size generation;

generating a read control signals based on said N horizontal sync signals and said horizontal output sizes; and

storing each line of said output image generated from said format converter and outputting said each stored line of said output image according to said read control signals.

8. (Canceled)

9. (Canceled)

10. (Original) The apparatus of claim 7, wherein the i th horizontal output size is larger than the $(i-1)$ th horizontal output size, and the N th horizontal output size is equal to said horizontal input size, where $i = 2, 3, 4, \dots, N$.

11. (Original) The apparatus of claim 7, wherein the i th horizontal output size is larger than the $(i-1)$ th horizontal output size, and the first horizontal output size is equal to said horizontal input size, where $i = 2, 3, 4, \dots, N$.

12. (Original) The apparatus of claim 7, wherein the i th horizontal output size is smaller than the $(i-1)$ th horizontal output size, and the N th horizontal output size is equal to said horizontal input size, where $i = 2, 3, 4, \dots, N$.

13. (Original) The apparatus of claim 7, wherein the i th horizontal output size is smaller than the $(i-1)$ th horizontal output size, and the first horizontal output size is equal to said horizontal input size, where $i = 2, 3, 4, \dots, N$.

14. (Currently amended) A method for correcting keystone distortions in a display system comprising:

receiving N horizontal sync signals of an input image;

generating N corresponding horizontal output sizes, each of said horizontal output sizes being generated at each of said sync signals based on a horizontal input size and each of N corresponding horizontal keystone offsets of [[an]] said input image; and

receiving said input image at a format converter and generating an output image by a format converter, converting the received input image based on the horizontal input size so that each line of said output image now having said corresponding has a horizontal output size, corresponding to a successive one of the N horizontal output sizes generated by said horizontal output size generation;

generating read control signals based on said N horizontal sync signals and said horizontal output sizes ~~received~~; and

storing each line of said output image generated from said format converter and outputting said stored line of said each output image according to said read control signals.

where N represents a total number of lines of said output image.

15. (Canceled)

16. (Canceled)

17. (Original) The apparatus of claim 14, wherein the i th horizontal output size is larger than the $(i-1)$ th horizontal output size, and the N th horizontal output size is equal to said horizontal input size, where $i = 2, 3, 4, \dots, N$.

18. (Original) The apparatus of claim 14, wherein the i th horizontal output size is larger than the $(i-1)$ th horizontal output size, and the first horizontal output size is equal to said horizontal input size, where $i = 2, 3, 4, \dots, N$.

19. (Original) The apparatus of claim 14, wherein the i th horizontal output size is smaller than the $(i-1)$ th horizontal output size, and the N th horizontal output size is equal to said horizontal input size, where $i = 2, 3, 4, \dots, N$.

20. (Original) The apparatus of claim 14, wherein the i th horizontal output size is smaller than the $(i-1)$ th horizontal output size, and the first horizontal output size is equal to said horizontal input size, where $i = 2, 3, 4, \dots, N$.

21. (New) An apparatus for correcting keystone distortions in a display system comprising:

a horizontal size generator that receives N horizontal sync signals of an input image and generates N corresponding horizontal output sizes each of said horizontal output sizes being generated at each of said sync signals based on a horizontal input size and each of N corresponding horizontal keystone offsets of said input image;

a format converter that receives said input image and generates an output image, by converting the received input image based on the horizontal input size so that each line of said

output image has a horizontal output size corresponding to a successive one of the N horizontal output sizes generated by said horizontal size generator;

a sync signal generator that generates a read control signal based on said N horizontal sync signals and said horizontal output sizes; and

a line memory that stores each line of said input image and outputs said each stored line of said output image to said format converter according to said read control signal,

wherein N represents a total number of lines of said output image.

22. (New) A method for correcting keystone distortions in a display system comprising:

receiving N horizontal sync signals of an input image;

generating N corresponding horizontal output sizes, each of said horizontal output sizes being generated at each of said sync signals based on a horizontal input size and each of N corresponding horizontal keystone offsets of said input image;

receiving said input image at a format converter and generating an output image by converting the received input image based on the horizontal input size so that each line of said output image has a horizontal output size corresponding to a successive one of the N horizontal output sizes generated by said horizontal output size generation;

generating a read control signal based on a said N horizontal sync signals and said horizontal output sizes; and

storing each line of said input image and outputting said each store line of said output image to said format converter according to said read control signal,

wherein N represents a total number of lines of said output image.